



Health Facts

Hypertension



Introduction

Hypertension is defined as systolic blood pressure greater than 140mm Hg and diastolic greater than 90 mm Hg over a sustained period. High blood pressure (hypertension), frequently called "The Silent Killer" because of its dangerous and often symptom-less condition, which affects up to 50 million people in the United States. It may lead to heart attack, heart failure, stroke, kidney failure, visual impairment and premature death. In the vast majority of hypertension cases the cause is unknown. This is called primary (essential) hypertension. Close relatives of people who have primary hypertension often have it as well.

When blood vessels are exposed to constantly high pressure, a similar process is set in motion. Blood pressures as elevated as 220/170 (systolic pressure/diastolic pressure), quite common during activities such as weight lifting, do no harm. Only when excessive pressure is sustained day and night do blood vessel linings begin to be injured and undergo those unhealthy changes known as atherosclerosis. Over time, high blood pressure can damage nearly every organ in the body.

The best way to determine your blood pressure is to take several readings at different times during the day and on different days of the week. Blood pressure readings will vary quite a bit from moment to moment; what matters most is the average blood pressure. Thus, if many low readings balance out a few high readings, the net result may be satisfactory.

The following are some risk factors for Hypertension:

- Your Family history
- Age
- Smoking
- Excessive alcohol intake
- Overweight & Obesity
- Preexisting cardiovascular disease
- Diabetes
- Sedentary lifestyle
- A High Sodium intake
- Elevated LDL cholesterol
- Low HDL cholesterol
- Diet high in saturated fat and trans-fatty acids

What are the dietary guidelines for preventing Hypertension?

Study results indicated that elevated blood pressures were reduced by an eating plan that emphasizes fruits, vegetables, and low fat dairy foods and is low in saturated fat, total fat, and cholesterol. The diet should include whole grains, poultry, fish, and nuts and has reduced amounts of fats, red meats, processed foods, sweets, and sugared beverages. A low sodium diet helps to flush excess sodium and water from the body through urine, lessening the amount of fluid in the blood. Less fluid in your blood means the pressure against the inside walls of your blood vessels drops. If diet and exercise do not help there

is medication to help lower your blood pressure but continue the healthy diet and lifestyle. The **DASH Diet** (Dietary Approaches to Stop Hypertension), a plan combining low sodium and healthy eating behaviors can assist to achieve a lower blood pressure.

What are some ways to get started with the DASH diet?

- If you only have one or two vegetables/fruits a day, try added one more with meals
- Use half the butter and salad dressing you normally do
- Add yogurt, low-fat cheeses, leaner meats, and whole grains to your diet
- Try fruit as your dessert
- Limit the processed foods (baked goods, snacks foods, and crackers) because of the unfavorable oils such as, coconut, palm kernel, and palms oils.

What about exercising when I have High Blood Pressure?

- The current intensity recommendation for hypertensive individuals is to use low to moderate intensity exercise, 30 to 60 minutes per session for 5 to 6 times per week.
- It is important to remember that the key to a successful exercise program is consistency over time. Don't try to conquer the world the first time out.
- Endurance activities such as walking, swimming, cycling and low-impact aerobics should be the core of the exercise program.
- As aerobic conditioning improves, add low resistance, high repetition weight training. During weight training, holding one's breath should be avoided because it can result in large fluctuations in blood pressure and increase the potential of passing out or, in some individuals, possibly result in life threatening events such as abnormal heart rhythms.
- Lifestyle changes can dramatically reduce blood pressure. Increasing exercise, stopping smoking, and losing weight can all be highly effective. If lifestyle changes fail to reduce blood pressure, or if you can't make these alterations, many effective drugs are available.

For more DASH Diet information visit:

http://www.nhlbi.nih.gov/hbp/prevent/h_eating/h_eating.

If your blood pressure may be high, see your health care provider.

For more information on this and other health and wellness topics, visit Navy Knowledge Online (NKO) at <http://www.nko.navy.mil> or the Navy Environmental Health Center (NEHC) at <http://www-nehc.med.navy.mil/hp>.